



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,685	12/31/2003	George Fitzmaurice	1500.1083	1979
21171	7590	11/13/2009	EXAMINER	
STAAS & HALSEY LLP			NGUYEN, LE V	
SUITE 700			ART UNIT	
1201 NEW YORK AVENUE, N.W.			PAPER NUMBER	
WASHINGTON, DC 20005			2174	
			MAIL DATE	DELIVERY MODE
			11/13/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/748,685

**Applicant(s)**

FITZMAURICE ET AL.

**Examiner**

LE NGUYEN

**Art Unit**

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This communication is responsive to an amendment filed 7/17/09.
2. Claims 7-17 are pending in this application; and, claims 8 and 17 are independent claims. Claims 1-6 and 18-27 have been cancelled; and, claims 7 and 17 have been amended. This action is made Final

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7-9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Screen Dumps of Macromedia Flash MX ("Macromedia Flash") in view of Bernstein et al. ("Bernstein", US 2004/0093565), in view of Buxton et al. ("Buxton", US 6,094,197), and further in view of Fox et al. ("Fox", US 2002/0171690 A1).

As per claim 8, although Macromedia Flash teaches an interface comprising layer representation graphic having layer names inputable by a user and displayable (figs. 2 and 4; page 1) and a control associated with the representation graphic activable from within the layer representation and that allows a corresponding layer to be edited (figs. 2-4; *for each layer, controls such as controls 38 and 40 are activatable, from within the layer representation, to display a pop-up menu such as pop-up menu*

50), Macromedia Flash does not explicitly disclose input by a user that is displayable as hand drawn strokes/gestures. Bernstein teaches input by a user that is displayable as hand drawn strokes/gestures (Abstract; figs. 10-11). It would have been obvious to an artisan at the time of the invention to incorporate the method of Bernstein with the method of Macromedia Flash given that pen-based systems are particularly well-suited for mobile users due to the ease of use and portability of pen peripherals and that handwritten ink are often times more recognizable to the user of the pen-based system, given that handwriting recognition software are prone to errors. However, Macromedia Flash and Bernstein do not explicitly disclose selections or operations with underlying menus such as applying an editing function to a layer. Buxton teaches selections or operations with underlying menus where a mark simultaneously selects a graphical representation and selects an operation on the graphical representation (fig. 11; col. 9, lines 27-28 and 56-67). It would have been obvious to an artisan at the time of the invention to incorporate the method of Buxton with the modified method of Macromedia Flash in order to provide a straightforward way to embed multiple command attributes into a single mark, especially in view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007).

Macromedia Flash, Bernstein & Buxton still do not explicitly disclose the graphic having target areas with target sizes greater than  $2e$  where  $e$  is the distance error accuracy of an input device, i.e. the graphic may merely be some GUI box or window corresponding to a layer, and that this GUI box or window has other graphic objects which are targets, and that because there is always some distance accuracy error in

using an input device to position the cursor, these graphic objects are designed to be at least twice that distance error (specification, pp 3-4). Fox teaches graphic having target areas with target sizes greater than  $2e$  (figs. 3(A-C); par [0002], [0004], [0036]-[0039]; widget 21 has a target size greater than 2 times the distance error of the pointer to the widget for selection emphasis, i.e., as the physical pointer position 25 approaches target boundary dimension 23, which is approximately within 2.5 widget distance from the widget to the pointer, the force field of the pointer snaps to the selectable portion of widget 21 and the widget expands its visual size to a boundary dimension 5 times its previous size). It would have been obvious to an artisan at the time of the invention to incorporate the method of Fox with the method of Macromedia Flash, Bernstein & Buxton in order to provide an improved GUI as available display real estate on a device shrinks with handheld portable devices and object presentation becomes more compact and a selection pointer tracking requires more manual dexterity and concentration on the user's part, especially in view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007).

As per claim 7, the modified Macromedia Flash teaches an interface comprising: a drawing dialog box invoked by the control and allowing the user to input the layer names (Macromedia Flash: figs. 2-4; page 1; Bernstein: sections [0039]-[0041]).

As per claim 9, the modified Macromedia Flash teaches an interface wherein the control invokes a menu of a layer editing menu type (Macromedia Flash: figs. 2-4, pages 1-3). The modified Macromedia Flash further teaches a menu being of a marking menu type (Buxton: fig. 11; col. 9, lines 27-28 and 56-67).

As per claim 11, the modified Macromedia Flash teaches an interface wherein each layer control comprises a pop-up menu control for layer editing comprising performing selection or operations with underlying menus where a) activation of a control via a click selects a corresponding layer, and b) execution of another click selects an operation on the layer (Macromedia Flash: figs. 2-4; *i.e. activation of a control via a "click" selects a corresponding layer for an editing operation on the layer*). The modified Macromedia Flash further teaches a marking menu that performs selections or operations with underlying menus where a mark simultaneously selects a graphical representation and selects an operation on the graphical representation (Buxton: fig. 11; col. 9, lines 27-28 and 56-67) as well as a graphical representation having layer names and additional controls associated with the graphical representation such as a move control for moving a position of a layer in a layer editor stack (Macromedia Flash: figs. 2-4; *via a drag operation in the timeline*) and a transparency control controlling the transparency of a corresponding drawing layer (Macromedia Flash: figs. 2-4; *via Windows > Panel > Effect*).

As per claim 12, the modified Macromedia Flash teaches an interface wherein each layer graphic has an indicator indicating whether a corresponding drawing layer is hidden or visible (Macromedia Flash: figs. 2-4; *in the eye icon column, indicators "." indicate that the layers are visible*).

As per claim 13, the modified Macromedia Flash teaches an interface wherein each layer graphic has an indicator indicating whether a corresponding drawing layer is one of hidden or locked (Macromedia Flash: figs. 2-4; *from left to right, first "."*

*(depicted) indicator indicates that the layers are visible, while "X" (not shown) indicator indicates that the layers are hidden; and, second "u" indicator (depicted) indicates that the layers are unlocked, while a lock icon indicator (not shown) in place of the "u" indicator indicates that the layers are locked).*

As per claim 14, the modified Macromedia Flash teaches an interface wherein a background layer has a text label (Macromedia Flash: fig. 4; *background layer "Layer 2"*).

As per claim 15, the modified Macromedia Flash teaches an interface comprising a graphical representation having layer names (Macromedia Flash: figs. 2-4; e.g. *"Layer 1" and "square"*) and a pop-up menu control activatable for each layer, the layer editor interface further comprising performing selection or operations with underlying menus where a) activation of a control via a click selects a corresponding layer, and b) execution of another click selects an operation on the layer (Macromedia Flash: figs. 2-4; *i.e. activation of a control via a "click" selects a corresponding layer for an editing operation on the layer*). The modified Macromedia Flash further teaches performing selections or operations with underlying menus where a mark simultaneously selects a graphical representation and selects an operation on the graphical representation (Buxton: fig. 11; col. 9, lines 27-28 and 56-67).

As per claim 16, the modified Macromedia Flash teaches an interface wherein making a marking gesture in association with the layer representation graphic initiates a function with respect to one or more of the layers (Macromedia Flash: figs. 2-4, pages 1-3; Bernstein: section [0039]).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Screen Dumps of Macromedia Flash MX ("Macromedia Flash") in view of Bernstein et al. ("Bernstein", US 2004/0093565), Buxton et al. ("Buxton", US 6,094,197) and Fox et al. ("Fox", US 2002/0171690 A1) as applied to claim 8, and further in view of Tosey (US 2004/0125153).

As per claim 10, although the modified Macromedia Flash teaches an interface wherein an active layer is highlighted with shading surrounding the name (Macromedia Flash: figs. 2-3), the modified Macromedia Flash does not explicitly disclose highlighting with a frame surrounding the name. Tosey teaches highlighting with a frame surrounding a name (fig. 1; paragraph [0002]; *element 100*). It would have been obvious to an artisan at the time of the invention to incorporate the method of Tosey with the method of the modified Macromedia Flash as an implementation preference for emphasizing objects that have focus, especially in view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007).

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Screen Dumps of Macromedia Flash MX ("Macromedia Flash") in view of Bernstein et al. ("Bernstein", US 2004/0093565), in view of Buxton et al. ("Buxton", US 6,094,197) in view of Fox et al. ("Fox", US 2002/0171690 A1), in view of Tosey (US 2004/0125153), and further in view of Decoste et al. ("Decoste", US 6,317,142 B1).

As per claim 17, Macromedia Flash teaches a layer editor interface comprising layer representation graphic having selection targets with a box shape, each selection box comprising controls activatable for each layer and having layer names inputable by



Art Unit: 2174

a user and displayable (figs. 2 and 4; page 1) comprising: a drawing dialog box invoked by the control and allowing the user to input the layer names (figs. 2-4; page 1), a graphical representation having layer names and additional controls associated with the graphical representation such as a move control for reordering or moving a position of a layer in a layer editor stack (figs. 2-4; *via a drag operation in the timeline*) and a transparency/opacity control controlling the transparency/opacity of a corresponding drawing layer (figs. 2-4; *via Windows > Panel > Effect*) and a control associated with the representation graphic activable from within the layer representation and that allows a corresponding layer to be edited (figs. 2-4; *for each layer, controls such as controls 38 and 40 are activatable, from within the layer representation, to display a pop-up menu such as pop-up menu 50*) wherein controls include selections for new layer (figs. 2-4; page 3; *"Insert > Layer"*), rename layer (figs. 2-4; page 1; *"Properties"*), delete layer (figs. 2-4; page 1; *"Delete Layer"*), merge layer (figs. 2-4; page 3; *wherein the active layer is combined with the layer below the active layer so that the content of the layers are combined*), lock layer (figs. 2-4), hide layer (figs. 2-4), position layer (figs. 2-4; page 2; *comprises a mode in which dragging on the layer itself moves the currently selected layer in 2 dimensions*) and an option of clearing the contents of the active layer (figs. 2-4; *via Edit > Cut or Edit > Clear selection*) wherein a control invokes a menu of a layer editing menu type (figs. 2-4, pages 1-3), wherein an active layer is highlighted with shading surrounding the name (figs. 2-3), wherein each layer graphic has an indicator indicating whether a corresponding drawing layer is hidden or visible (Macromedia Flash: figs. 2-4; *in the eye icon column, indicators "✓" indicate that the layers are visible*),

Art Unit: 2174

wherein each layer graphic has an indicator indicating whether a corresponding drawing layer is one of hidden or locked (Macromedia Flash: figs. 2-4; *from left to right, first "." (depicted) indicator indicates that the layers are visible, while "X" (not shown) indicator indicates that the layers are hidden; and, second "." indicator (depicted) indicates that the layers are unlocked, while a lock icon indicator (not shown) in place of the "." indicator indicates that the layers are locked*) and wherein each layer control comprises a pop-up menu control for layer editing comprising performing selection or operations with underlying menus where a) activation of a control via a click selects a corresponding layer, and b) execution of another click selects an operation on the layer (figs. 2-4; *i.e. activation of a control via a "click" selects a corresponding layer for an editing operation on the layer*). Macromedia Flash does not explicitly disclose input by a user that is displayable as hand drawn strokes. Bernstein teaches input by a user that is displayable as hand drawn strokes (Abstract; figs. 10-11). It would have been obvious to an artisan at the time of the invention to incorporate the method of Bernstein with the method of Macromedia Flash given that pen-based systems are particularly well-suited for mobile users due to the ease of use and portability of pen peripherals and that handwritten ink are often times more recognizable to the user of the pen-based system, given that handwriting recognition software are prone to errors. However, Macromedia Flash and Bernstein do not explicitly disclose selections or operations with underlying menus such as applying an editing function to a layer. Buxton teaches selections or operations with underlying menus where a mark simultaneously selects a graphical representation and selects an operation on the graphical representation (fig. 11; col. 9,

lines 27-28 and 56-67). It would have been obvious to an artisan at the time of the invention to incorporate the method of Buxton with the modified method of Macromedia Flash in order to provide a straightforward way to embed multiple command attributes into a single mark, especially in view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007).

Macromedia Flash, Bernstein & Buxton do not explicitly disclose the graphic having target areas with target sizes of at least  $2e$  where  $e$  is the distance error accuracy of an input device, i.e. the graphic may merely be some GUI box or window corresponding to a layer, and that this GUI box or window has other graphic objects which are targets, and that because there is always some distance accuracy error in using an input device to position the cursor, these graphic objects are designed to be at least twice that distance error (specification, pp 3-4). Fox teaches graphic having target areas with target sizes greater than  $2e$  (figs. 3(A-C); par [0002], [0004], [0036]-[0039]; widget 21 has a target size greater than 2 times the distance error of the pointer to the widget for selection emphasis, i.e., as the physical pointer position 25 approaches target boundary dimension 23, which is approximately within 2.5 widget distance from the widget to the pointer, the force field of the pointer snaps to the selectable portion of widget 21 and the widget expands its visual size to a boundary dimension 5 times its previous size). It would have been obvious to an artisan at the time of the invention to incorporate the method of Fox with the method of Macromedia Flash, Bernstein & Buxton in order to provide an improved GUI as available display real estate on a device shrinks with handheld portable devices and object presentation becomes more compact

and a selection pointer tracking requires more manual dexterity and concentration on the user's part, especially in view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007).

Macromedia Flash, Bernstein, Buxton & Fox do not explicitly disclose highlighting with a frame surrounding the name. Tosey teaches highlighting with a frame surrounding a name (fig. 1; paragraph [0002]; *element 100*). In view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007), it would have been obvious to an artisan at the time of the invention to incorporate the method of Tosey with the method of Macromedia Flash, Bernstein, Buxton & Fox as an implementation preference for emphasizing objects that have focus.

Macromedia Flash, Bernstein, Buxton, Fox & Tosey still do not explicitly disclose a slider for setting opacity. Decoste teaches a slider for setting opacity (col 14, lines 28-43). In view of KSR, 127 S. Ct. 1727 at 1742, 82 USPQ2d at 1397 (2007), it would have been obvious to an artisan at the time of the invention to incorporate the method of Decoste with the method of Macromedia Flash, Bernstein, Buxton, Fox & Tosey so that users have control over the region(s) to be filled.

### ***Response to Arguments***

7. Applicant's arguments filed 7/17/09 have been fully considered but they are not persuasive.

Applicant argued:

a) Nothing in Fox teaches the graphic has target areas with target sizes of greater than  $2e$  where  $e$  is a distance error accuracy of an input device and, moreover, nothing in Fox confirms the Office Action's estimates and thus appears to be nothing more than impermissible hindsight. Furthermore, the reason for combining Fox with the other references is also unrelated to solving the problem related to a distance error accuracy of an input device but is related to attempting to solve the problem of human inaccuracy, addressing manual dexterity and concentration of a user.

b) Nothing cited or found in Fox, Macromedia Flash, Bernstein and Buxton teaches allowing a corresponding layer to be edited by hand drawn gestures.

The Office disagrees for the following reasons:

Per (a), paragraph [0025] of the published instant application describes a target preferably at least  $2e$  in size to assure that if the user does point to the center of the target the cursor will be within the target; since, in view of applicant's opinion, targets are preferably at least 4 mm high and wide in comparison to current tablet pc pens or styli, which is about 1-2 mm. The specification goes on to further mention that this (i.e.,  $2e$ ) is of course an extreme minimum and that 10 mm is much more acceptable and preferable given that "Fitts Law" of pointing indicates that the ease of pointing is proportional to the width of the target, so bigger is generally better. Therefore, Fox's teaching is consistent with both the specification and claim language that a target size be at least  $2e$  or twice as large as usual for ease of pointing (figs. 3(A-C); par [0002], [0004], [0036]-[0039]; wherein five times larger is at least  $2e$  and is the optimal five times the described more acceptable size).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that solves the problem of human inaccuracy, addressing manual dexterity and concentration of a user, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Per (b), Macromedia Flash and Bernstein teaches an interface comprising layer representation graphic having layer names inputable by a user and displayed where the user can simply draw any type of graphics to identify the layer (figs. 2 and 4; page 1), a control associated with the representation graphic activable from within the layer representation and that allows a corresponding layer to be edited (figs. 2-4; for each layer, controls such as controls 38 and 40 are activable, from within the layer representation, to display a pop-up menu such as pop-up menu 50 also from left to right, first "." (depicted) indicates that the layers are visible, while "X" (not shown)

indicates that the layers are hidden; and, second "." (depicted) indicates that the layers are unlocked, while a lock icon (not shown) in place of the "." indicates that the layers are locked) and a drawing dialog box invoked by the control and allowing the user to input the layer names as text (Macromedia Flash: figs. 2-4; page 1; Bernstein: sections [0039]-[0041]). Bernstein further teaches input via hand drawn strokes/gestures (Abstract; figs. 10-11).

### ***Inquires***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Lê Nguyen whose telephone number is **(571) 272-4068**. The examiner can normally be reached on Monday - Friday from 7:00 am to 3:30 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow, can be reached at (571) 272-7767.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2174

Business Center (EBC) at 866-217-9197 (toll-free).

LVN

Patent Examiner

November 2, 2009

/DENNIS-DOON CHOW/

Supervisory Patent Examiner, Art Unit 2174